



Military Medicine

Tripler's Emergency Medical Response Team

MAJ Robert E. Johnson MD
Assistant Commander
Emergency Medical Response Team
Tripler Army Medical Center

...a passenger jet crashes on takeoff from the Majuro airport...a canister of mustard agent is accidentally dropped and leaks at the Chemical Demilitarization Plant at Johnston Atoll, resulting in several severe chemical casualties...an explosion rips through the new convention center, resulting in scores of deaths and hundreds of trauma victims, overwhelming Honolulu EMS capabilities, and worse yet, many victims are found convulsing and apneic, demonstrating evidence of a sinister terrorist bombing with nerve agent. Use your imagination and think of the recent disasters that have occurred worldwide, both acts of nature and acts of terrorism, and wonder how we would respond here in Honolulu or elsewhere in the Central Pacific.

For almost twenty years, Tripler Army Medical Center has had an Emergency Medical Response Team (EMRT), dedicated to responding to just such scenarios. When the Johnston Atoll Chemical Demilitarization Plant was under construction in the 1980's, increased emphasis was placed on the EMRT, leading to substantial improvements in its organization, training and equipment. The bombings of the World Trade Center and the Alfred P. Murrah Federal Office Building in Oklahoma City, the Tokyo sarin gas attack by the Aum Shinrikyo cult and other incidents have led the Department of Defense to increase its emphasis on assistance to the civilian populations of our nation and its friends. At Tripler, this emphasis has been translated into another generation of improvements in the EMRT, to better enable it to assist and interface with local and regional emergency response plans.

The EMRT is comprised of thirty doctors, nurses, corpsmen and two administrative officers. All members are volunteers, and are recruited based on their individual motivation, commitment, and level of experience in medical operations in austere environments. Of these thirty, eight are physicians: a commander and assistant commander with extensive experience and training in military operational medicine and nuclear, biological and chemical (NBC) casualty management; two emergency physicians; two general surgeons and two critical care physicians. All physicians are qualified in Advanced Trauma Life Support (ATLS) and have attended the U.S. Army's course in chemical and biological casualty management. Two nurse anesthetists and two registered nurses are also team members; they, too, are required to attend the chemical and biological casualty course. The complement of enlisted medical personnel includes two LPNs, several paramedics and EMTs, as well as laboratory and radiographic technicians. All team members receive

enhanced training in trauma management, triage, personal protective equipment, decontamination of chemical casualties and emergency management of NBC agent casualties. If needed, the EMRT can be augmented with personnel from Tripler's Mental Health and Radiation Accident Management Teams.

The EMRT has a three-tiered mission. Its primary responsibility is to back up the medical operations at Johnston Atoll in the event of a large scale accident. The risk of such an event is extremely low, due to the multiple layers of safety checks and containment engineered into the plant. Even so, the EMRT maintains a high level of readiness with frequent event simulation exercises and state-of-the-art medical and chemical protection equipment.

Because of the team's rapid response capability and ability to treat and stabilize trauma victims in hostile environments, the TAMC commander, Brigadier General Warren Todd, has decided to make the EMRT available as a response asset to augment the emergency responders of the State of Hawaii in the event of a mass disaster. The team would be especially effective if the disaster involved the use of weapons of mass destruction (WMD), i.e., nuclear, biological or chemical weapons. This is its second mission. In this scenario the EMRT would provide assistance in two ways: 1) it functions as a platform for the provision of ATLS in the proximity of a WMD or conventional disaster, and 2) team members in advanced personal protective equipment would be able to triage and provide EMT-level medical care to victims who had not yet been decontaminated or evacuated from the scene of the accident. EMRT leadership personnel have developed a close liaison with the emergency response community in Honolulu, to include leaders in the State and County civil defense offices, Honolulu EMS, Fire and Police Departments, as well as with FEMA and other Department of Defense agencies. An important spin-off of this liaison has been the involvement on a consulting basis of EMRT physicians in the development of Honolulu's planned Metropolitan Medical Strike Team (MMST). MMSTs are currently being formed in the 26 largest U.S. cities with support from the federal government. Their purpose is focal and unique to respond to mass disasters involving WMDs.

The third mission of the EMRT is to provide assistance to other territories and nations in the Pacific who request assistance in the event of a disaster involving significant casualties. The EMRT is currently directing its energies at enhancing its response capabilities in this role. The types of disasters that might require the team's assistance include hurricanes, tsunamis, earthquakes, aircraft accidents and explosions.

Because of the insular nature of the Hawaii community, we are not likely to benefit from the emergency deployment of disaster assistance teams from the mainland in the event of a catastrophe. The central Pacific area is home to many people who lack an effective health care system and certainly lack the ability to respond effectively to a mass disaster. The command group at Tripler and the personnel of the EMRT are keenly aware of these dilemmas. It is our purpose to fill this gap.